

Minnesota's One-child School Readiness Dividend

School readiness in Minnesota is worth about \$43,000 per low-income child using targeted early education investments and nearly \$13,000 per child in universal pre-K.

Numerous research studies have demonstrated the economic value of investing in effective early education programs that cognitively, socially, and emotionally prepare low-income children at risk of school failure for success in school. School readiness prevents or reduces needless public spending, starting with K-12 special education and lasting through adulthood in the social welfare, health care, and criminal justice systems.

Fewer studies have calculated the benefits associated with investing in universal preschool programs that serve all children. A recent study by Lynch and Vaghul (2015)¹ provides a framework for comparing the savings and returns generated by a universal pre-K approach relative to early education targeted to low-income children. The framework is based on potential program impacts and differences in the incidence rates of the various outcomes for low-income populations and the general population. That is, averting negative outcomes, such as dropping out of school and unemployment, yields future economic benefits for low-income children, but lower incidences of negative outcomes in the general population provide fewer opportunities to save or gain money.

To calculate the present value of lifetime benefits, we use effect sizes of early education programs in published studies, Minnesota Census data and

incidence rates (e.g. high school graduation rates, crime rates), and actual expenditure data from state agencies on special education, health care, crime, and other areas and gains due to employment and tax returns. Details on the methodology are reported in a separate technical summary.

Targeted early learning investments in low-income children at-risk of school failure yield an estimated lifetime economic value \$43,000 per child, including \$33,000 in savings and revenue for Minnesota taxpayers. Universal pre-K yields an estimated lifetime economic value per Minnesota child of \$13,000, with the largest portion of the benefits (\$8,465) going to the individual child over time.

The universal pre-K calculations include low-income children as members of the general population, therefore driving up the average per child return in the universal program.

The lifetime value for low-income children is lower than \$56,000 reported in 2012, primarily due to reduced costs associated with reduced probability of incarcerations and updated methods using actual length of incarcerations in Minnesota, which are lower than the estimated average sentence times for jail and prison used in the 2012 calculations.

¹ Lynch, R. and Vaghul, K. ((2015). Investing in Early Childhood Education: The fiscal, economic, and societal gain of a universal pre-kindergarten program in the United States, 2016-2050. Washington Center for Equitable Growth.

Total lifetime value to Minnesota per child achieving school readiness

	Targeted low-income program	Universal pre-K
Estimated K-12 savings due to increased school readiness	\$43,327	\$12,976
Savings in special education costs due to reduced incidence of non-cognitive disabilities	\$1,099	\$465
Savings in K-12 expenditures due to fewer students repeating a grade	\$80	\$17
Estimated savings and revenue for MN taxpayers due to increased school readiness	\$33,035	\$5,156
Savings in incarceration costs (Adult justice system only) due to fewer felony incarcerations	\$861	\$73
Savings in health care costs	\$9,434	\$2,058
Savings in MFIP cash and food assistance	\$18,910	\$1,971
Savings from reduced child welfare (foster care) costs	\$616	\$7
Additional income tax and sales tax revenues	\$3,041	\$1,001
Savings in reduced use of unemployment insurance	\$173	\$47
Estimated additional savings and benefits to participating children	\$5,453	\$8,465
Additional lifetime income (after taxes)	\$28,487	\$9,214
Reduced public assistance benefits (MFIP, food, and health assistance) to individuals	(\$22,465)	(\$446)
Health care costs to individuals	(\$569)	(\$303)
Estimated additional savings and benefits to other members of society	\$3,660	(\$1,127)
Reduced costs to crime victims	\$1,550	\$23
Savings from reduced substance misuse, such as treatment costs and value of increased productivity and lifespan	\$4,427	\$83
Health care costs to private payers	(\$2,317)	(\$1,234)

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For more information

For more information about the research studies, probabilities, program effect sizes and parameters, and other assumptions used in this analysis, please contact:

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